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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,254	03/17/2004	Marc D. Etchells	2186.005USU	4331
7590 06/21/2007 Charles N.J. Ruggiero, Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. 10th Floor One Landmark Square Stamford, CT 06901-2682			EXAMINER HAND, MELANIE JO	
			ART UNIT 3761	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/802,254

Applicant(s)

ETCHELLS, MARC D.

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-11,13-16,20,21,23-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1,3-11,13,20,21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/27/06</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4, 2007 has been entered.

### *Response to Arguments*

Applicant's arguments with respect to claims 11, 13-16, 20, 21, 23 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed April 4, 2007 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding the rejection of claims 1, 3-12, 20-22 and 24-26 under 35 U.S.C. 102: Applicant argues that Damett does not teach that the instant pad has a complex shape. Examiner has restated the rejection to indicate that the pad is four-sided and thus a polygon, which is one of the shapes set forth in claim 1. The fact that applicant's intent was to disclose a pad that is not square or rectangular is immaterial. Applicant has not disclosed an alternate definition for polygon (aside from the commonly known definition in the art) that specifically excludes squares or rectangles. Definitions of "polygon" from three dictionaries are attached hereto to support the commonly understood definition in the art. Applicants' arguments with regard to dependent claims 3-12 have been fully considered but are

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not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

Applicant argues with respect to claim 20 that it is the unsealed areas of the intermittently sealed areas of the topsheet and bottom sheet that provide the claimed fluid guiding channels. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that only the unsealed areas form the fluid guiding channels) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicants' arguments with regard to dependent claims 21, 23 and 24 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 20, which have been addressed *supra*.

Applicant argues with respect to claim 25 that Darnett does not teach varying patterns of perforation resulting in zones of increased or decreased fluid uptake. The perforations are directly responsible for the flow of fluid through to lower layers of the article, therefore more perforations necessarily cause increased uptake, less perforations necessarily cause decreased uptake. A varying pattern of perforations necessarily causes more perforations in some areas and less perforations in others, which in turn leads to the respective increased or decreased fluid uptake. Darnett teaches the claimed varying pattern of perforations. The fact that the rejection did not address said zones is immaterial as, at best, the limitation regarding the zones was phrased in the form of functional language defining what the pattern does, rather than what it is, and functional language bears little or no patentable weight. Thus Darnett teaches zones having increased and decreased fluid uptake. Applicants' arguments with regard to dependent

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claim 26 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 25, which have been addressed *supra*.

Applicant argues with respect to claim 27 that because metallocene was not claimed as a reactant or catalyst, that claim 27 is not a process claim, and that metallocene polyethylene would add cost to the pad, there is no suggestion to modify the article of Darnett so as to include metallocene polyethylene as the material for the top sheet and/or bottom sheet. The fact that metallocene is not recited as a reactant or catalyst in a process claim is immaterial. Metallocene is a catalyst. Metallocene is an adjective that describes the polyethylene, because metallocene is a catalyst used to produce the polyethylene web. The web is still polyethylene, if the metallocene polyethylene web is used in the food pad of Darnett, one of ordinary skill in the art making or using the invention would still yield a food pad with a polyethylene top and/or bottom sheet; that is, the product of Darnett yielded when following the exact teachings of Darnett as written would be structurally identical to the product of Darnett yielded if a polyethylene top and/or bottom sheet made via addition of a metallocene catalyst to the reaction mixture is substituted when making the invention according to the teachings of Darnett. The fact that claim 27 is not a process claim is why the metallocene polyethylene bears little patentable weight, hence the product-by-process argument.

Applicant argues with respect to claim 28 that Examiner is applying a product-by-process reasoning and did not address the electrostatic bonding step. Examiner refers applicant back to the rejection wherein the electrostatic bonding is clearly addressed insofar as Valyi is prior art that recognizes equivalency between the adhesive bonding taught by Darnett and electrostatic bonding and thus it would be obvious to one of ordinary skill in the art to modify the method of making an absorbent pad taught by Darnett such that the bonding step is

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accomplished by electrostatic bonding with a reasonable expectation of success. Per *In re Fount*, no express motivation need be provided by Valyi for combining the teachings of Darnett and Valyi. Applicants' arguments with regard to dependent claim 29 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

Applicant's arguments, see Remarks/Arguments, pages 21-23, filed April 4, 2007, with respect to claims 14-16 have been fully considered and are persuasive. The rejection of claims 14-16 under 35 U.S.C. 103 has been withdrawn.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on October 26, 2006 was filed after the mailing date of a final action on October 3, 2006, but with a request for continued examination on April 4, 2007. The submission is in compliance with the provisions of 37 CFR 1.97(b)(3). Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,3-12, 20-22, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Darnett (U.S. Patent No. 6,270,873).

With respect to **Claims 1,4,5,7,8,25**: Darnett teaches an absorbent food pad comprising microperforated laminate polyethylene top sheet 10, bottom sheet 11 which is identical to

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topsheet 10, and pouches 14 of superabsorbent material. The pad is of a rectangular shape, thus the pad has the shape of a polygon. There is at least one pouch as taught by Darnett, for example four (Fig. 1a) or twelve (Fig. 4a) pouches. The topsheet and backsheet of Darnett are adhered together around the islands of absorbent to form valleys between the three-dimensional islands. Those valleys function as fluid channels in that they provide a means for fluid to flow from one valley to another, transporting liquid throughout the pad.

With respect to **Claims 3,6,9**: Darnett teaches that the top and bottom sheets 10,11 are comprised of three layers. (Col. 7, lines 33-36) With respect to claim 9, Darnett teaches a thickness of 42 microns for a two-layer embodiment and 37 microns plus the thickness of the intermediate paper sheet 22. The total thickness of the three-layer embodiment is intended to be substantially identical to that of the two-layer embodiment, therefore the range of thicknesses taught by Darnett is 37-42 microns, or 0.0014 – 0.0017 inches, which falls within the range set forth in claim 9.

With respect to **Claim 10**: Pouches 14 contain superabsorbent polymer. (Col. 4, lines 13-15, Col. 6, lines 47-49)

With respect to **Claim 20**: Please see the rejection of Claim 1 in addition to the following: The areas between pouches 14 where the topsheet 10 and bottom sheet 11 are sealed together form valleys (channels) for transporting fluid.

With respect to **Claim 21**: Darnett teaches that the topsheet 21 and bottomsheet 24 are structurally identical and are comprised of a laminate of three layers, one of which is a paper

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sheet 22 that is capable of functioning as a transfer sheet and, since the barrier sheet of the claimed invention can be comprised of cellulose, which is a permeable material, the transfer layer taught by Darnett, comprised of cellulose, can also function as a barrier layer.

With respect to **Claim 24**: Darnett teaches a bottom sheet in Fig. 12 that is non-perforated. (Col. 7, lines 60-64)

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett (U.S. Patent No. 6,270,873) in view of Topolkaraev et al (U.S. Patent Application Publication No. 2002/0127385)

With respect to **Claims 11**: Darnett teaches pads having at least two pouches 14. The pouches are separated from each other by heat-sealing the top and bottom sheets 10,11 together around the periphery of the cells or other means. Darnett teaches a paper (i.e. cellulose) barrier layer 22 between the absorbent material and the top sheet. (Col. 3, lines 43-48)

Darnett does not teach any of the items set forth in amended claim 11. Topolkaraev teaches a barrier layer material comprising filler material, which comprises cellulose or chitosan. Since Topolkaraev teaches that this film is used as a barrier layer in an absorbent article, the article of Topolkaraev seeks to solve a similar problem in the art to the article of Darnett (i.e. provide a breathable barrier layer for use in an absorbent article), it would be obvious to one of



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ordinary skill in the art to modify the article of Darnett so as to have a barrier layer comprised of chitosan as taught by Topolkaraev with a reasonable expectation of success.

With respect to **Claim 26**: Darnett teaches varying the microperforation size and shape to compliment the type of absorbent used to minimize loss of absorbent through the pouch wall, therefore the variation is capable of existing in a single sheet, defining a pre-determined pattern.

Claims 23, 27, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett ('873).

With respect to **Claim 23**: Darnett does not explicitly teach kiss cutting the top sheet, however Darnett does implicitly teach that all methods of producing a perforated sheet are viable to produce the topsheet of the instant invention, and kiss-cutting is considered herein as a process that produces perforations, and Darnett teaches fluid channels, therefore it would be obvious to one of ordinary skill in the art to employ a perforated film in the prior art pad of Darnett which has been formed by kiss cutting and which thus contains fluid channels for dispersing fluid away from contact with a user with a reasonable expectation of success, thus preventing contamination.

With respect to **Claim 27**: Please see the rejection of Claim 1 in addition to the following:

Darnett teaches a polyethylene topsheet but does not explicitly teach a metallocene polyethylene. Metallocene refers to the catalyst employed in the production of the polyethylene film. The limitation with respect to metallocene polyethylene therefore constitutes product-by-process claim language rendering claim 27 unpatentable over the prior art of Darnett. See *In re*

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*Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113.

With respect to **Claims 28,29**: Darnett teaches an absorbent food pad comprising microperforated laminate polyethylene top sheet 10, bottom sheet 11 which is identical to topsheet 10, and pouches 14 of superabsorbent material, which constitute a complex shape. There is at least one pouch, therefore other embodiments taught by Darnett having, for example four (Fig. 1a) or twelve (Fig. 4a) pouches, define other complex shapes such that the pad has at least one complex shape. (Col. 6, lines 39-56) Darnett does not teach electrostatically holding pouches 14 in place prior to sealing thus forming a bond between the topsheet 10 and bottom sheet 11 without the use of adhesive, however the method of sealing the pouches in place is an alternate method of holding said pouches electrostatically in place or corona treating the top or bottom sheet, producing an identical product. Claim 18 is thus unpatentable over the prior art of Darnett. Examiner refers applicant to U.S. Patent No. 4,048,361 to Valyi et al which teaches a composite material comprised of polyethylene, as are the topsheet and bottomsheets of Darnett, and teaches that electrostatic bonding and adhesive bonding are equivalent methods of bonding the layers of the composite together, and to other pieces of said composite material. In the instant case substitution of equivalent methods requires no express motivation, as long as the prior art recognizes equivalency, *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 85 USPQ 328 (USSC 1950).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Darnett ('873) in view of Topolkaraev ('385) as applied to claim 11 above, and further in view of Fontenot et al (U.S. Patent No. 6,926,862)

With respect to **Claim 13**: The combined teaching of Darnett and Topolkaraev does not teach pouches that contain any of the active agents set forth in the group in claim 13. Fontenot teaches a liner for food or food receptacles comprising a backing layer and an absorbent layer which further comprises an antibacterial agent. ('862, Abstract, Col. 3, lines 66,67, Col. 4, lines 1-3, Col. 15, lines 55-61) It would be obvious to one of ordinary skill in the art to provide antifungal means as taught by Fontenot to the pad taught by the combined teaching of Darnett and Topolkaraev, as the pad of said combined teaching is also used in direct contact with food.

***Allowable Subject Matter***

Claims 14-16 are allowed.

***Reasons for Indicating Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: A thorough search of the prior art of record did not disclose any reference, alone or in combination with other reference(s) that teaches or fairly suggests an absorbent pad wherein one or more side panels further comprises one or more islands disposed between a top sheet and back sheet. The closest prior art of record is the combined teaching of Darnett and Larssonneur. Darnett teaches a base panel (seen in Fig. 3a), but does not teach one or more side panels hingeably connected to said sheet. Larssonneur teaches an absorbent pad 11 with sealed side edges 110, 112 comprised of topsheet 102 and bottom sheet 106 sealed together to enclose the

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absorbent mat 104, which is substantially identical to the sealed edges taught by Darnett. Top and bottom sheets 102,106 taught by Larssonneur are comprised of polyethylene, as are the topsheet and bottomsheets taught by Darnett. The pad 11 is adapted to fit in a tray with upstanding walls 13 therefore side edges 110,112 are capable of folding upward to line the walls of the tray. Therefore, they are considered herein to be hingeably connected. These edges line the tray and form a leakage barrier for the fluids absorbed in the center of pad 11, therefore it would be obvious to one of ordinary skill in the art to configure the sealed side edges so as to hingeably connected as taught by Larssonneur. However, neither Darnett nor Larssonneur, alone or in combination with the other, teaches or fairly suggests hingeably connected side panels wherein one or more islands are disposed between a top sheet and a bottom sheet.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

June 13, 2007

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

